

EPA General Permit WAG130000 - Annual Report



Annual Report of Operations

for Year 2019

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:

WAG-13-0017

Facility & Owner Information

Facility Name:

Skookum Creek Hatchery

Operator Name (Permittee):

Lummi Indian Business Council

Address:

Physical Address:
6498 Saxon Rd
Acme, WA 98220

Lummi Indian Business Council
2665 Kwina Road
Bellingham, WA 98226

Email:

tomc@lummi-nsn.gov

Phone:

360-312-2320

Owner Name (if different from operator):

Email:

Phone:

Best Management Practices (BMP) Plan

Has the BMP Plan been reviewed this year? ☒ Yes ☐ No

Does the BMP Plan fulfill the requirements of the General Permit? ☒ Yes ☐ No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

BMP and QA Plan were updated to clarify sampling and temperature logger locations, clarification of effluent limitations, updates to facility inspection checklist, and updates to facility maintenance and repairs form.

Updated BMP and QA Plan were submitted to the EPA R10 NPDES Compliance Office in April, 2019.

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Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): **91,955**

Pounds of food fed to fish during the maximum month:
10,236

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
Chinook Salmon	26,028	South Fork Nooksack River	April & May
Coho Salmon	65,927	South Fork Nooksack River	May

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	8,523	428	July	4,702	3,960
February	9,880	2,240	August	6,269	7,744
March	34,339	4,642	September	9,403	4,576
April	50,162	10,236	October	12,538	6,336
May	89,595	4,327	November	13,434	4,576
June	8,740	2,296	December	13,829	5,016

Additional Comments: **Note on differences between total harvestable weight and monthly weights:** The maximum pounds of fish for May, 2019 includes subyearling coho, which are not included in the total harvestable weight of 91,055 pounds because they will be released from the hatchery in 2020. In addition, a release of 360,886 of the 1,638,204 subyearling chinook occurred in the middle of April, 2019.

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Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
Fecal Waste (from yearling pond drawdowns)	June	Sewage Treatment
Juvenile Mortalities	Daily (or as needed)	Septic System
Adult Carcasses	Weekly (August-December)	Crab bait, nutrient enhancement
Additional Comments: A septic pumping company removed fish waste from the primary abatement system and transferred it to a sewage treatment plant.		

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
N/A	N/A	N/A	N/A
Additional Comments: No mass mortality events.			

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Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.

No noncompliance events in 2019.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
Monthly	N/A	Abatement system, vacuum systems, and waste drainlines
Weekly	N/A	Water delivery lines, fish ladder, pumps, filters, and valves

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Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year**.

Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Azithromycin
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chloramine-T: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chlorine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Draxxin
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - injectable
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - medicated feed
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Florfenicol (Aquaflor)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Formalin - 37% formaldehyde: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Herbicide - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hormone - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hydrogen Peroxide: <i>See additional reporting requirements on page 7</i>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Iodine: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxytetracycline
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Potassium Permanganate: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Romet
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SLICE (emamectin benzoate)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sodium Chloride - salt
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vibrio vaccine
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other: Magnesium sulfate (Epsom salts)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other:

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Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: None		Generic Name: Magnesium sulfate/epsom	
Reason for use: Hexamita spp. (A.K.A. Spironucleus) control			
<input type="checkbox"/> Preventative/Prophylactic <input checked="" type="checkbox"/> As-needed	Total quantity of formulated product per treatment (specify units): 2.64 lbs.*	Total quantity of formulated product used in past year (specify units): 7.92 lbs.	
Date(s) of treatment: April 1st, 3rd, and 5th.			Total number of treatments in past year: 3
Maximum daily volume of treated water: 1,728,000 gallons	Treatment concentration (specify units): 3.0% of feed ration	Duration and frequency of treatment(s): One feeding on specified dates.	
Method of application: <input type="checkbox"/> Static Bath <input checked="" type="checkbox"/> Medicated Feed <input type="checkbox"/> Flow-through <input type="checkbox"/> Other (describe):			
Location in facility chemical was used (check all that apply): <input type="checkbox"/> Raceways <input checked="" type="checkbox"/> Ponds <input type="checkbox"/> Incubation building <input type="checkbox"/> Off-line settling basin <input type="checkbox"/> Other (describe):			
Where did water treated with this chemical go? (check all that apply): <input checked="" type="checkbox"/> Discharged w/o treatment <input type="checkbox"/> Septic System <input type="checkbox"/> Settling basin <input type="checkbox"/> Publicly owned treatment works <input type="checkbox"/> Other (describe):			
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: * 2.64 lbs. magnesium sulfate mixed with 88 lbs feed per feeding (3 times).			

Brand Name:		Generic Name:	
Reason for use:			
<input type="checkbox"/> Preventative/Prophylactic <input type="checkbox"/> As-needed	Total quantity of formulated product per treatment:	Total quantity of formulated product used in past year (specify units):	
Date(s) of treatment: 3%			Total number of treatments in past year:
Maximum daily volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treatment(s):	
Method of application: <input type="checkbox"/> Static Bath <input checked="" type="checkbox"/> Medicated Feed <input type="checkbox"/> Flow-through <input type="checkbox"/> Other (describe):			
Location in facility chemical was used (check all that apply): <input type="checkbox"/> Raceways <input type="checkbox"/> Ponds <input type="checkbox"/> Incubation building <input type="checkbox"/> Off-line settling basin <input type="checkbox"/> Other (describe):			
Where did water treated with this chemical go? (check all that apply): <input type="checkbox"/> Discharged w/o treatment <input type="checkbox"/> Septic System <input type="checkbox"/> Settling basin <input type="checkbox"/> Publicly owned treatment works <input type="checkbox"/> Other (describe):			
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			

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Aquaculture Drugs and Chemicals (cont'd)

Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments	
Tank Volume	Liters
Desired Static Bath Treatment Concentration	µg/L
Volume of Product Needed	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: Active Ingredient: Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	Specify Units
Maximum % of Facility Discharge Treated	% of Total Discharge

Flow-Through Treatments	
Tank Volume	267.4 or 9.46 Liters
Calculated Flow Rate	34 or 15 Liters/Minute
Duration of Treatment	10 Minutes
Desired Flow-Through Treatment Concentration of Product	100,000 µg/L
Amount of Product to Add Initially	0.2L or 0.1L (per incubator) Liters Product
Amount of Product to Add During Treatment	200mL or 100mL mL/Minute
Total Volume of Product Needed	0.2L or 0.1L per incubator Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 0.00047ppm Active Ingredient: 0.0000047ppm Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	16,637,760 liters Specify Units
Maximum % of Facility Discharge Treated	1.25% % of Total Discharge

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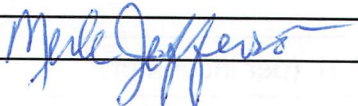
Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.

None to report except for modifications to sampling locations and methods, per BMP and QA Plan updates.

Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name of person signing	Title
Merle Jefferson Sr.	Natural Resources Executive Director
Applicant Signature 	Date Signed 1-13-20

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191

Washington Hatchery Annual Report

1200 Sixth Avenue, Suite 900

Seattle, WA 98101-3140